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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,774	06/20/2003	Bryan Keith Feller	9281	5936

27752 7590 05/30/2006

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EXAMINER

HAND, MELANIE JO

ART UNIT PAPER NUMBER

3761

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/600,774		FELLER ET AL.	
	Examiner		Art Unit	
	Melanie J. Hand		3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-17, 19, 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to the rejection of claims 1, 2, 12 and 13 have been fully considered but they are not persuasive. Examiner's reason for rejecting these claims does not pertain to the use of physical characteristics as functional language. The rejection pertains solely to the vagueness and indefiniteness of the disclosure with respect to the lack of specific compositions that would enable one of ordinary skill in the art to reproduce the article of the claimed invention. Examiner is withdrawing the rejection of claim 1 under 35 U.S.C. 112. The rejection of claims 2, 12 and 13 is maintained.

Applicant's arguments with respect to claims 1-8, 12-18 and 20 under 35 U.S.C. 102/103 and the rejection of claims 9-11 and 19 under 35 U.S.C. 103 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

Claim 14 is objected to because of the following informalities: the phrase "the topsheet" lacks antecedent basis in claim 1 from which it depends. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. There is no specific composition disclosed for the facing layer or the absorbent core that renders claims 2, 3 and 12 definite.

Claims merely setting forth physical characteristics desired in article, and not setting forth specific compositions which would meet such characteristics, are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in future and which would impart desired characteristics; thus, expression "a liquefiable substance having a liquefaction temperature from about 40°C. to about 300°C. and being compatible with the ingredients in the powdered detergent composition" is too broad and indefinite since it purports to cover everything which will perform the desired functions regardless of its composition, and, in effect, recites compounds by what it is desired that they do rather than what they are; expression also is too broad since it appears to read upon materials that could not possibly be used to accomplish purposes intended.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 4-6, 8, 12-14, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman et al (U.S. Patent No. 4,865,596) in view of Bhambra (U.S. Patent No. 6,786,155).

With respect to **claims 1, 2, 14, 17**: Weisman teaches an absorbent article having a lining layer 61 (facing layer having a first elastic modulus) and comprised of cotton or paper (taught by reference to U.S. Patent No. 4,865,596 to Roberts) thereby making the lining liquid-permeable.

Absorbent core 65 is attached thereto at substantially the entirety of the interfacial area adjacent lining layer 61, and has a second elastic modulus. Weisman teaches that the elastic modulus of the fibers that core 65 is comprised of (second modulus) is 0.1×10^{10} dynes/cm². ('596, Col. 6, lines 61-63) Outer layer 60 is joined to the lining layer 61 at each layer's periphery, and Weisman teaches by reference that the outer layer 60 is comprised of a thin, plastic liquid impermeable material.

Weisman does not teach a first modulus for the lining layer 61. Bhambra teaches a paper substrate having an elastic modulus of greater than 7 GPa. Bhambra teaches that said substrate is dimensionally stable enough to withstand mechanical stresses from a printing cylinder, therefore such a substrate would necessarily be stable enough to withstand mechanical stresses during wear. It would be obvious to one of ordinary skill in the art to use the paper substrate, which is comprised of substantially identical material to the type of paper referred to be Roberts and is therefore also comfortable, as the material for lining layer taught by Weisman, thus providing a permeable facing layer with a first modulus that is greater than the second modulus inherent in the absorbent core. With respect to claim 2, the ratio of elastic moduli in the article of the combined teaching of Weisman and Bhambra would be at least 7/0.1, (7×10^{10} dynes/cm² (7 Gpa) / 0.1×10^{10} dynes/cm²) or 70:1.

With respect to **claim 4**: Weisman teaches that the density of core 65 is in the range of 0.006 – 0.1 g/cc. ('596, Col. 17, lines 24-30)

With respect to **claim 6**: Weisman teaches sanitary napkins as absorbent articles that the absorbent core of the instant invention is usable with. ('596, Abstract)

With respect to **claim 8**: The lining layer of the article of Weisman defines a body-facing surface. The article has a width and has a lateral centerline. Weisman does not teach a convex deformation with respect to the body-facing surface upon application of opposing forces along the lateral centerline, however core 65 is considered herein to be capable of deforming in such a manner, given the relatively low elastic modulus of the core material.

With respect to **claim 12**: Weisman does not teach a first elastic modulus for the lining layer. Bhambra teaches that the elastic modulus for a paper material suitable for use as the lining layer material as taught by Weisman is at least 7Gpa, which does not fall within the range set forth by applicant. However the value does yield an elastic moduli ratio with the absorbent core taught by Weisman that falls within the range set forth in the disclosure for the ratio, and applicant has not assigned criticality to the value for the first elastic modulus, therefore it would be obvious to one of ordinary skill in the art to modify the paper material taught by Bhambra to have an elastic modulus that falls within the range set forth in claim 12, as the range constitutes a range of optimum values for said modulus.

With respect to **claim 13**: Weisman teaches an elastic modulus for core 65 that is 0.1×10^{10} dynes/cm², or 0.1 Gpa, or 100 kPa. This value does not fall within the range set forth by applicant. However the value does yield an elastic moduli ratio with the absorbent core taught by Weisman that falls within the range set forth in the disclosure for the ratio, and applicant has not assigned criticality to the value for the second elastic modulus, therefore it would be obvious to one of ordinary skill in the art to modify the core taught by Bhambra to have an elastic modulus that falls within the range set forth in claim 12, as the range constitutes a range of optimum values for said modulus.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman ('596) in view of Bhambra ('155) as applied to claims 1, 2, 4-6, 8, 12-14, 17 and 20 above, and further in view of Hammons (U.S. Patent Application Publication No. 2003/0004484)

With respect to **claim 3**: Neither Weisman nor Bhambra teaches a width for an absorbent article. Hammons teaches that the width of the typical female panty is in the range of 5 cm (50 mm) to 7.5 cm (75 mm) ('484, ¶ 0083) It would be obvious to one of ordinary skill in the art to modify the absorbent article of the combined teaching of Weisman and Bhambra so as to have an effective width in the range taught by Hammons to ensure that such article will fit properly in the undergarments of most users.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman ('596) in view of Bhambra ('155) as applied to claims 1, 2, 4-6, 8, 12-14, 17 and 20 above, and further in view of Mackey et al (U.S. Patent No. 4,986,882)

With respect to **claim 5**: Weisman teaches a caliper for the absorbent core (second caliper) in the range of 0.46 – 3.1 cm. Neither Weisman nor Bhambra teaches a caliper for the paper lining layer. Mackey teaches an absorbent paper tissue having a caliper of 0.314 mm (first caliper). ('882, Col. 28, line 65) Mackey teaches that this absorbent tissue is suitable for use in absorbent articles. ('882, Col. 1, lines 8-10) Since the material is substantially identical to that taught by Bhambra and can withstand a calendaring cylinder during formation (Col. 1, lines 8-10), an indication of substantially identical strength to the paper of Bhambra, it would be obvious to one of ordinary skill in the art to use such a paper in place of the paper material taught by Bhambra

with a reasonable expectation of success. Therefore the combined teaching of Weisman and Bhambra and Mackey yields an article with a caliper ratio in the range of 1:15 – 1:100, which falls in the range set forth by applicant.

Claims 9-11 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman ('596) in view of Bhambra ('155) as applied to claims 1, 2, 4-6, 8,12-14,17 and 20 above, and further in view of Cinelli et al (U.S. Patent Application Publication No. 2002/0013565).

With respect to **claims 9-11,19**: The combined teaching of Weisman and Bhambra does not teach a secondary topsheet. Cinelli teaches an absorbent article comprising a multilaminate elastomeric nonwoven topsheet. ('565, ¶ 0095) Cinelli teaches that this topsheet is apertured so as to be pervious to exudates yet nonabsorbent thereby preventing rewet. ('565, ¶ 0092) A multilaminate structure would have enhanced magnitudes of these characteristics, therefore it would be obvious to one of ordinary skill in the art to modify the topsheet taught by The combined teaching of Weisman and Bhambra to be a multilaminate apertured film structure as taught by Cinelli.

Claims 15 and 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman ('596) in view of Bhambra ('155) as applied to claims 1, 2, 4-6, 8,12-14,17 and 20 above, and further in view of Ohashi et al ('498).

With respect to **claims 15,20**: The combined teaching of Weisman and Bhambra does not teach a pair of deep-embossed channels. Ohashi teaches an absorbent article comprising a pair of

deep-embossed grooves 15 defining an effective width (Fig. 2) ('498, ¶ 0013). Ohashi teaches that these grooves collect any exudates traveling toward the side edge, preventing leakage. Therefore it would be obvious to modify the absorbent core of the combined teaching of Weisman and Bhambra so as to have an absorbent structure inside an undergarment which contains a pair of transversely opposed grooves to prevent leakage as taught by Ohashi. ('498, ¶ 0016)

With respect to **claim 16**: Ohashi teaches that the width of the channels is between 2-20 mm, but also teaches that the grooves can be widened, therefore Ohashi teaches widths greater than 20 mm. ('498, ¶¶ 0005, 0015)

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

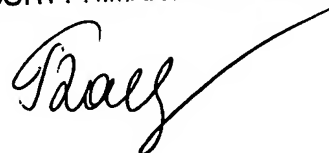
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand
Examiner
Art Unit 3761

MJH

TATYANA ZALUKAEVA
SUPERVISORY PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'T. Zalukaeva', with a long, sweeping horizontal stroke extending to the right.